Preface

The International Conferences “Days on Diffraction” are annually held by the Faculty of Physics of St.Petersburg University, St.Petersburg Branch of V.A. Steklov Mathematical Institute and Euler International Mathematical Institute of the Russian Academy of Sciences.

Approximately 140 scientists from all over the world took part in the “Days on Diffraction - 2009” Conference. The Organizing Committee is thankful to all the participants. We appreciate their presentations which have been made during plenary, parallel and poster sessions. Our special gratitude is to the authors of 36 papers selected for publication in the Proceedings for preparation of their manuscripts in accordance with the required rules.

The Organizing Committee

Organizing Committee

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This year we celebrated the 80-th anniversary of Vladimir Sergeevitch Buldyrev – the eminent scientist in the field of mathematical theory of wave phenomena! The progress in science would be impossible without scientific schools which in its term need “condensation centers”. As an example professor G. I. Petrashen could be nominated as such center in the 50-ies. Later on this role had moved to younger researches among whom was Vladimir Sergeevitch Buldyrev. Vladimir Sergeevitch had been a remarkable organizer of science: more than twenty of his pupils got their doctoral degree and six of them became professors, the initiation of “Diffraction Days” is strongly binded with his name.

He was the author and coauthor of many pioneering articles and books of mathematical theory of diffraction. He had been awarded by State Prize and St.-Petersburg university Prize.

Study of “whispering gallery” and “jumping ball” modes led Vladimir Sergeevitch to the notion of stability of rays in the first approximation and to elaboration of the so-called “infinitesimal ray method”. Together with boundary layer approach originated by V. A. Fock these studies open a new epoch in diffraction theory which is continuing up to nowadays. In the papers of V. S. Buldyrev his “analytical might” is striking. He wrote four textbooks and monographs. Most of them appeared in English and Russian. They are well-known by students and scientists.

Beyond scientific activity Vladimir Sergeevitch with his wife Aida Andreevna and with his friends climbed many mountains, paddled down several rivers and travelled in many winter ski tours.

We wish Vladimir Sergeevitch new successes and mainly good health.

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